

This listing of the claims will replace all prior versions and listings of claims in the application:

**Listing of the Claims:**

1-33. (Cancelled)

34. (Previously Presented) A method for the treatment of a cancer, the method comprising:

administering to a patient afflicted with the cancer a metal tricarbonyl compound of the general formula:



wherein

M is rhenium or technetium or an isotope thereof;

at least two of  $X_1$ ,  $X_2$  and  $X_3$  are monodentate ligands selected from the group consisting of CO,  $NH_3$ , aromatic heterocycles, thioethers and isocyanides; or

two of  $X_1$ ,  $X_2$  and  $X_3$  are part of a bidentate ligand and the other one is a monodentate ligand selected from the group consisting of CO, aromatic heterocycles, thioethers and isocyanides.

35-36. (Cancelled)

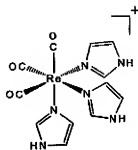
37. (Previously Presented) The method of claim 34, wherein the aromatic heterocycles are selected from the group consisting of pyridine, pyrimidine, pyrazine, imidazole, pyrazole, triazole, tetrazole, thiazole, oxazole and purine.

38. (Previously Presented) The method of claim 37, wherein the purine is guanine or 9-methyl guanine.

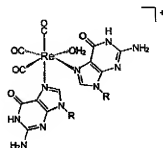
39. (Previously Presented) The method of claim 34, wherein the thioethers are selected from the group consisting of linear substituted dialkyl thioethers, cyclic thioethers, and tetrahydrothiophen.

40. (Previously Presented) The method of claim 34, wherein the isocyanides are selected from the group consisting of an alkyl chain comprising a terminal NC group coupled thereto and optionally comprising a  $-COOH$ ,  $NH_2$ ,  $-X$ ,  $-SH$ , or  $-OH$  functional group, wherein X is an anionic leaving group.

41. (Previously Presented) The method of claim 34, wherein the bidentate ligand is an amino acid or dicarboxylate.
42. (Previously Presented) The method of claim 41, wherein the amino acid is an anionic amino acid.
43. (Previously Presented) The method of claim 41, wherein the amino acid is a non-natural  $\alpha$ - or  $\beta$ -amino acid.
44. (Previously Presented) The method of claim 43, wherein the non-natural amino acid is N,N-dimethyl glycine.
45. (Currently Amended) The method of claim 34, wherein at least two of the ligands of the tricarbonyl complex shown in formula 1 are exchanged by guanine or guanosine after **incubation for three days at 37°C** with guanine or guanosine being present in a **slight excess** over rhenium or technetium.
46. (Previously Presented) The method of claim 34, wherein the compound is a compound selected from the group consisting of:



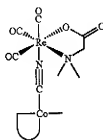
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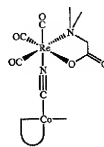
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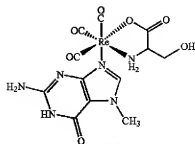


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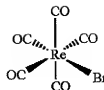


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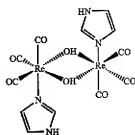




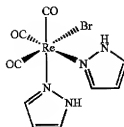
**11 (L-Ser) and 12 (D-Ser)**



**14**



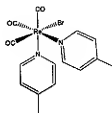
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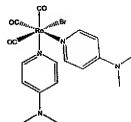
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**21**

and combinations thereof.

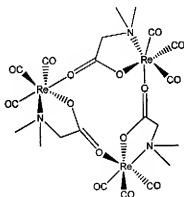
47. (Previously Presented) The method of claim 34, wherein  $X_1$  and/or  $X_2$  and/or  $X_3$  are coupled to a targeting moiety.

48. (Previously Presented) The method of claim 47, wherein the targeting moiety is selected from the group consisting of bombesin, neurotensin, somatostatin, glucosamine, nucleosides, nuclear localizing sequence peptides (NLS peptides), oligonucleotides, anthracyclines, and acridines.

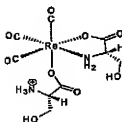
49. (Previously Presented) The method of claim 34, wherein the metal tricarbonyl compound is chemotoxic.

50. (Canceled)

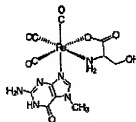
51. (Currently Amended) A compound selected from the group consisting of:



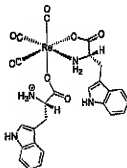
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11 (L-Ser) and 12 (D-Ser)



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52. (Previously Presented) The compound of claim 51 further coupled to a targeting moiety.

53. (Previously Presented) The compound of claim 52, wherein the targeting moiety is selected from the group consisting of bombesin, neurotensin, somatostatin, glucosamine, nucleosides, nuclear localizing sequence peptides (NLS peptides), oligonucleotides, anthracyclines, and acridines.